IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS TYLER DIVISION

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NANOLOGY ALPHA LLC,	
Plaintiff,	
v.	CIVIL ACTION NO.
WITEC WISSENSCHAFTLICHE INSTRUMENTE UND TECHNOLOGIE GmbH,	JURY TRIAL DEMANDED
Defendant.	

COMPLAINT FOR PATENT INFRINGEMENT

Subject-Matter Jurisdiction

1. This is an action for patent infringement arising under the patent laws of the United States of America, Title 35 of the U.S. Code. This Court has original subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

Parties

- 2. Plaintiff Nanology Alpha LLC ("Plaintiff") is a Texas limited liability company. Plaintiff has its principal place of business at 1400 Gables Court, Plano TX 75075.
- 3. Defendant WITec Wissenschaftliche Instrumente und Technologie GmbH ("WITec" or "Defendant") is a German limited liability company with its principal place of business at Lise-Meitner-Str. 6, D-89081 Ulm, Germany. WITec designs and manufactures microscopes for analysis of nano-scale features.

Personal Jurisdiction and Venue

4. This Court has personal jurisdiction over defendant WITec in this action because WITec has committed acts giving rise to this action within or directed towards the forum state of Texas, and has established contacts with the forum state of Texas such that the exercise of jurisdiction over WITec would not offend traditional notions of fair play and substantial justice.

WITec, directly or through subsidiaries or intermediaries, has committed and continues to commit acts of infringement in the state of Texas by, among other things, offering to sell and selling products that infringe the asserted patents.

5. Venue is proper in this district under 28 U.S.C. §§ 1391(b), 1391(c) and 1400(b). As alleged above, defendant WITec is subject to this Court's personal jurisdiction with respect to this action. Further discovery will likely show that WITec has committed and continues to commit acts of infringement in this district by, among other things, offering to sell and selling products in this district that infringe the asserted patents.

Infringement of U.S. Patent No. 5,756,997

- 6. Plaintiff is the assignee of United States Patent No. 5,756,997 (the "'997 patent"), entitled "Scanning probe/optical microscope with modular objective/probe and drive/detector units." Plaintiff owns all rights in the '997 patent. The '997 patent was duly and legally issued by the United States Patent and Trademark office on May 26, 1998. The '997 patent is valid and enforceable. A true and correct copy of the '997 patent is included as Exhibit A and incorporated herein by reference.
- 7. Further discovery will likely show that WITec had knowledge of the '997 patent since at least the filing of this Complaint or shortly thereafter, and that WITec knew that its products infringed the patent.
- 8. WITec has used, offered for sale, sold, and imported into the United States products that infringe each of the claims of the '997 patent, and it continues to do so. These products infringe the claims literally and by the doctrine of equivalents. By way of exemplary illustration, and without limitation, the infringing products include WITec's family of scanning probe/optical microscopes (collectively "Infringing Products"), e.g. the WITec alpha300 A and the WITec alpha500 A, as well as their variant forms, e.g. the WITec alpha300 RA, alpha300 S, alpha300 RS, alpha300 RAS, and alph500 RA. The Infringing Products are identical in all aspects relevant to the '997 patent, and each allegation below applies to all the Infringing Products.

- 9. Each of the Infringing Products directly infringes claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11 of the '997 patent.
- 10. Each Infringing Product is capable of inspecting objects both by traditional microscopy through a video camera and by atomic force microscopy using an AFM tip. Atomic force microscopy, as implemented in the Infringing Products, is a technique for inspecting an object by passing a cantilever with very sharp tip over its surface and using a laser to detect the deflection of the cantilever, i.e. its vertical position. In each Infringing Product, the cantilever detection laser passes through the same objective lens that forms an image for the video camera.
- 11. Each Infringing Product constitutes a scanning probe/optical microscope for inspecting objects. It comprises a stand that connects and supports the components of the microscope and the object under inspection. Removably attached to the stand are a modular objective/probe unit, which is attached by means of a rotatable nosepiece, and a modular detector unit. Also attached to the stand are a video camera system and an illumination system.
- 12. Each Infringing Product's modular objective/probe unit comprises microscope objective optics capable of resolving an image, a cantilever with a sharp tip, and a precise mechanism that moves the cantilever horizontally and vertically. Moving the cantilever also moves the tip.
- 13. Each Infringing Product's modular detector unit comprises a laser light source, a light detector, and detection optics that connect the light source and light detector to the microscope. Further discovery will likely show that the modular detector unit also comprises electronic circuitry. The light detector measures the deflection of the cantilever using light from the laser light source, which is directed through the detection optics, microscope stand, and objective optics; reflects off the cantilever; and passes back through the objective optics, microscope stand, and detection optics before falling on the light detector. During a scan, the light detector measures the deflection of the cantilever as the tip is moved relative to the object under inspection. The detection optics are optically coupled to the objective lens.

- 14. Each Infringing Product's video camera system comprises image forming optics. The image is formed using light from the illumination system, which is directed through the objective optics, reflects off the object under inspection, and passes back through the objective optics before being directed to the video camera. The video camera system is optically coupled to the objective lens.
- 15. By offering for sale, selling, and importing into the United States the Infringing Products, and touting the benefits of using the Infringing Products' hybrid optical/AFM features, WITec has injured Plaintiff and is liable to Plaintiff for infringement of the '997 patent pursuant to 35 U.S.C. § 271.
- 16. As a result of WITec's infringement of the '997 patent, Plaintiff is entitled to monetary damages in an amount adequate to compensate for WITec's infringement, but in no event less than a reasonable royalty for the use made of the invention by WITec, together with interest and costs as fixed by the Court.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests that this Court enter:

- a. A judgment in favor of Plaintiff that Defendant has infringed, either literally and/or under the doctrine of equivalents, the '997 patent;
- b. A judgment and order requiring Defendant to pay Plaintiff its damages, costs, expenses, and prejudgment and post-judgment interest for its infringement of the '997 patent, as provided under 35 U.S.C. § 284;
- c. A judgment and order requiring Defendant to provide an accounting and to pay supplemental damages to Plaintiff, including without limitation, prejudgment and post-judgment interest;
- d. A judgment and order finding that this is an exceptional case within the meaning of 35 U.S.C. § 285 and awarding to Plaintiff its reasonable attorneys' fees against Defendant; and

e. Any and all other relief as the Court may deem appropriate and just under the circumstances.

DEMAND FOR JURY TRIAL

Plaintiff, under Rule 38 of the Federal Rules of Civil Procedure, requests a trial by jury of any issues so triable by right.

Dated: May 19, 2016 Respectfully submitted,

/s/ Elizabeth L. DeRieux

Elizabeth L. DeRieux (TX Bar No. 05770585)
D. Jeffrey Rambin (TX Bar No. 00791478)
CAPSHAW DERIEUX, LLP
114 E. Commerce Ave.

Gladewater, Texas 75647 Telephone: 903-845-5770

E-mail: ederieux@capshawlaw.com E-mail: jrambin@capshawlaw.com

Attorneys for Nanology Alpha LLC